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NEW CLAIMS 41-54

B' 41. (New) A device for rotating the polarization direction of polarized light, comprising
a source of linear polarized light that has a polarization direction at 45 degrees to a linear axis and is transmitted along an optical path, and

a reflector in a plane that is parallel to and intersects the linear axis and oriented to reflect such linear polarized light,

whereby the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path. C

42. (New) A method of rotating the polarization direction of linear polarized light that has a polarization direction at 45 degrees to a linear axis and is transmitted (propagates) along an optical path, comprising

reflecting such linear polarized light using a reflector that is in a plane that is parallel to and intersects the linear axis,

whereby the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path.

43. (New) The display system of claim 1, wherein the displays and the beam splitter are in respective planes that are parallel to a common linear axis,

wherein light from the displays is linear polarized,

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wherein the light from one of the displays that is reflected by the beam splitter has a polarization direction at 45 degrees to the linear axis and is transmitted along an optical path,

whereby upon reflection by the beam splitter the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path.

B, 44. (New) The display system of claim 1, wherein the polarized light output is linear polarized light.

45. (New) The display system of claim 44, wherein the displays are flat panel displays having a generally rectangular shape and the direction of polarization for both displays is diagonal relative to such generally rectangular shape.

46. (New) The display system of claim 44, wherein the beam splitter combines images from both displays to provide viewable overlapping images that respectively have crossed polarization.

47. (New) The display system of claim 1, wherein the polarization for both displays is circular.

48. (New) The display system of claim 47, wherein the beam splitter combines images from both displays to provide viewable overlapping images that respectively have circular polarization in opposite directions.

49. (New) The method of claim 31, wherein light forming said images is linear polarized light, and the polarization direction of the linear polarized light forming one of

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said images is at 45 degrees to a linear axis and is transmitted (propagates) along an optical path,

said combining comprising reflecting into such common light path such linear polarized light forming said one of said images by using the beam splitter with the beam splitter in a plane is parallel to and intersects the linear axis,

whereby the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path.

50. (New) The method of claim 31, wherein said displaying comprises displaying such left and right images having linear polarization.

51. (New) The method of claim 31, wherein said displaying comprises displaying such left and right images having circular polarization

52. (New) The method of claim 34, wherein the displays are in respective planes that are parallel to a linear axis and light forming said images is linear polarized light, and the polarization direction of the linear polarized light forming one of said images is at 45 degrees to a linear axis and is transmitted (propagates) along an optical path,

said combining comprising reflecting into such common light path such linear polarized light forming said one of said images by using the beam splitter with the beam splitter in a plane that is parallel to and intersects the linear axis,

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B¹ whereby the polarization direction of the reflected linear polarized light relative to the polarization direction of the linear polarized light prior to reflection is rotated 90 degrees about the optical path.

53. (New) The method of claim 34, wherein both said presenting steps present such images having linear polarization.

54. (New) The method of claim 34, wherein both said presenting steps present such images having circular polarization.

AMENDED CLAIMS 1, 2, 6-16, 18, 19, 21, 23-26, 29-32, 34, and 36-38

B² 1. (Amended) A display system comprising a pair of displays, each having a polarized light output, the polarization direction for both displays being the same, the displays being at an angle to each other, and a beam splitter at the bisectrix of said angle to combine images from the displays whereby one image is transmitted by the beam splitter and the other image is reflected by the beam splitter to provide direct view of images from the displays.

2. (Amended) The display system of claim 1 in which the displays are flat panel LCDs.

B³ 6. (Amended) The display system of claim 3, in which the polarization is modified by adding quarter wave plates, respectively, to the light paths from the LCDs so that the images from the respective displays as viewed via the beam splitter are separated by right and left circular polarized light.

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7. (Amended) The display system of claim 3, in which circular polarization is created by a single quarter wave plate located between the beam splitter and the eye of a viewer.

8. (Amended) The display system of claim 2, in which a stereo pair makes up a selected region of the images from the displays.

9. (Amended) The display system of claim 2, in which the displays are disposed at right angles and are in the vertical planes.

10. (Amended) The display system of claim 2, in which one display for direct viewing through the beam splitter is in the vertical plane and the display that is reflected in the beam splitter is in the horizontal plane.

11. (Amended) The display system of claim 10, in which a stereo signal received by the display system is a stereo image pair and the display directly viewed through the beam splitter is in the vertical plane and is scanned from top to bottom and the display generator that is reflected by the beam splitter in the horizontal plane and is scanned from bottom to top.

12. (Amended) The display system of claim 10, in which the image signal for the display that is viewed by reflection by the beam splitter is inverted top to bottom.

13. (Amended) The display system of claim 2, in which the image signal for the display that provides an image that is reflected is inverted from right to left electronically.

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14. (Amended) The display systems of claim 2, and in which a stereo signal is received as a stereo pair, one of the stereo pairs is provided to one display and the other of the stereo pairs is provided to the other display, and the display viewed through the beam splitter is scanned from left to right and the display that is reflected by the beam splitter for viewing is scanned from right to left.

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15. (Amended) The display system of claim 1 in which a field sequential signal is displayed such that alternate fields are displayed on both displays so that each field is displayed for a full frame.

16. (Amended) The display system of claim 1, in which the displays are made up of red green and blue color sub pixels to form picture elements and/or arranged to overlay each other so as to minimize color halos and color fringes.

18. (Amended) The display system of claim 16 in which a field sequential signal is displayed such that alternate fields are displayed on the two displays so that each field is displayed for a full frame.

19. (Amended) The display system of claim 1, further comprising a mount to position the displays relative to each other in perpendicular planes.

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21. (Amended) The display system of claim 20, said mount including a cubical structure, the beam splitter being in the cubical structure and the cubical structure having open areas receiving light from the respective displays and passing such light to the beam splitter.

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23. (Amended) The display system of claim 1, further comprising a package for containing the displays and the beam splitter.

24. (Amended) The display system of claim 23, said package comprising cover portions coupled by a hinge and movable to contain in protected relation the displays and beam splitter and openable to provide access and use of the displays and beam splitter.

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25. (Amended) The display system of claim 24, said cover portions being openable to permit arrangement of the displays in perpendicular planes with the beam splitter therebetween.

26. (Amended) The display system of claim 24, said cover portions being openable to permit arrangement of the displays in parallel relation in a common plane.

29. (Amended) The display system of claim 28, further comprising operating software to invert the data for presentation to one of the displays for displaying the data in inverted relation to the data displayed by the other displays.

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30. (Amended) A packaged stereoscopic display system, comprising a pair of displays, a beam splitter, a storage package containing the displays and beam splitter, the storage package including a pair of cover portions and a hinge connecting the cover portions allowing the cover portions to be closed to contained in protected closed relation the displays and beam splitter, and to be opened to expose the displays and beam splitter in respective operative relation to present stereoscopic images for viewing.

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31. (Amended) A method of displaying stereo images, comprising simultaneously displaying a left image on a display and a right image on another display such that the left and right images have the optical polarization in the same direction, and using a beam splitter combining those images in a common light path such that the optical polarization of the left image portion and the right image portion are different in such common light path.

32. (Amended) The method of claim 31, further comprising discriminating the respective images in the common light path using optical polarization.

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34. (Amended) A method of presenting a stereoscopic image for viewing, comprising presenting a left eye image on a display, presenting a right eye image on another display that is at an angle relative to the first mentioned display, both said presenting steps presenting such images having optical polarization in the same direction, and combining in a substantially common light path the respective images such that the respective images in the common light path have different optical polarization.

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36. (Amended) The method of claim 34, further comprising inverting the image data for one of the images for presenting for viewing in substantially superposed relation to the other image.

37. (Amended) The method of claim 36, said combining comprising using a beam splitter to combine the images by transmitting one image and reflecting the other image.